

REMARKS

Claims 14 – 17 are indicated as allowed. Claims 18 and 19 are rejected under 35 U.S.C. §102(b) as being anticipated by, or in the alternative, under 35 U.S.C. §103(a) as obvious over U.S. Patent No. 5,334,648 to Drews et al ("Drews"). Claim 20 is rejected under 35 U.S.C. §103(a) as being unpatentable over Drews. The Applicants respectfully traverse these rejections.

The present invention relates to a binder composition used in the production of a nonwoven mat having a surprisingly improved balance of dry tensile strength and tear strength. The binder composition comprises:

- a) a urea formaldehyde resin
- b) 0.5 to 15% by weight of an emulsion polymer based on the dry weight of the urea formaldehyde resin; and
- c) 0.5 to 15% by weight, based on the dry weight of the emulsion polymer solids, of a salt or free acid of an anionic organic phosphate ester surfactant.

The phosphate ester surfactant is employed in a specific amount to improve the balance to tear strength and tensile strength. Such surfactant, the amount thereof and the balancing of tear strength and tensile strength is not taught by the prior art, and particularly Drews.

Drews primarily relates to the use of copolymers of vinyl chloride, softening monomers (e.g., acrylates like ethyl acrylate) and functional monomers (e.g., crosslinking monomers like N-methylol acrylamide) that are blended with a urea formaldehyde resin. Specifically, Drews focuses on the selection of the softening monomer and the so-called "effective amount" thereof to achieve suitable wet and dry tensile strength. A wide variety of anionic surfactants are generically proposed at column 4, line 7-31 of Drews. However, there is no recognition by Drews of the specific benefits of the use of a salt or free acid of an anionic organic phosphate ester surfactant or its use in an amount of 0.5 to 15% by weight to improve the balance of tear strength and tensile strength.

"A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." MPEP 2131 (quoting *Verdegual Bros. V. Union Oil Co.*, 2 U.S.P.Q.2d 1051, 1053 (Fed. Cir. 1987). "The identical invention must be shown in as complete detail as is contained in the...claim." MPEP 2131 (quoting *Richardson V. Suzuki Motor Co.*, 9 U.S.P.Q. 2d 1913, 1920 (Fed. Cir.

1989)).

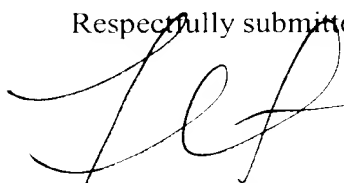
Each and every element of Claim 18 are clearly not set forth in Drews, particularly the use of a phosphate ester resin and the recited amount. Thus Applicants respectfully submit that the §102(b) rejection of Claims 18 and 19 is improper and should be withdrawn.

With respect to the §103(a) rejections, to establish a *prima facie* case of obviousness, three basic criteria must be met. First, the prior art references (or references when combined) must teach or suggest all the claim limitations. Second, there must be some suggestion or motivation either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or combine the teachings. Finally, there must be a reasonable expectation of success. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure. MPEP 2142 (citing *In re Vaeck*, 20 U.S.P.Q.2d 1438 (Fed. Cir. 1991)).

The cited references do not teach or suggest all of the recitations of Claim 20. The specific use of the phosphate ester and the amount thereof is not taught or suggested by Drews. The specific number of units of the polyethyleneoxy chain is also not taught or suggested. The mere suggestion that a wide variety of surfactants can be used in a generic range of 1 to 10 parts irrespective of the specific surfactant does not teach or suggest all of the claim limitations. There is no suggestion or motivation to modify the reference in the manner proposed by the Examiner and there is no reasonable expectation of success. The only suggestion or motivation is based on Applicants' disclosure – such is clearly not permitted. Applicants respectfully submit that the Action has not established a *prima facie* case of obviousness, and requests that the §103(a) rejections be withdrawn.

Applicant respectfully requests the Examiner withdraw the §102 and §103 rejections. It is respectfully submitted that this application is in condition for allowance, which action is respectfully requested.

Respectfully submitted,



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In re: Wallace
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